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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,090	04/23/2004	Tohru Koyama	50099-254	7582

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EXAMINER	
VAZQUEZ, ARLEEN M	

ART UNIT	PAPER NUMBER
2829	

MAIL DATE	DELIVERY MODE
08/20/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/830,090

**Applicant(s)**

KOYAMA ET AL.

**Examiner**

ARLEEN M. VAZQUEZ

**Art Unit**

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-7 and 9-19 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 and 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/23/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Low (US 6,515,494)** in view of **Jain et al. (US 6,061,322)** further in view of **Chang (US 2002/0135392)**.

As to claims 1 and 4, **Low** discloses in Figure 8 a failure analyzer (80) comprising an analysis plate (46) including a first main surface mounting a sample (64) thereon and a second main surface (surface of 46 opposite to sample 64) opposite to said first main surface; and a failure detector (50,92,94,96) including an optical system (92,94) and detecting a failure caused in said sample (64) using said optical system (Col. 7 lns 46-67), wherein a recess (48) is provided in said second main surface of said analysis plate (46), and said failure detector(50,92,94,96) irradiates a light (by 94) onto said sample (64) from a direction of said second main surface (surface opposite to sample 64) of said analysis plate (46), wherein said failure analyzer (80) comprises a support member (54) for supporting said sample (64) independently of said analysis plate (46) and a first driver (98,100,102) for changing the position of said recess (48) in analysis plate 46) relative to the sample (64) in a direction parallel to said first main surface by moving said analysis plate (46) in parallel to said first main surface (the first

driver will change the position of the recess which will comprise the protrusion in a direction parallel, as shown by arrow Z, to said first main surface which is the surface on which the sample is mounted) . **Low** discloses everything above but fails to teach a protrusion which functions as a solid immersion lens and does not protrude from said second main surface is provided on a bottom surface of said recess and said analysis plate is made of silicon or quartz glass. However, **Jain et al.** discloses in Figure 3 a protrusion (SIL 14) which functions as a solid immersion lens and does not protrude from said second main surface is provided on a bottom surface of said recess (36).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify **Low** by having a protrusion, which functions as a solid immersion lens as taught as **Jain et al.** to have an accurate ability to collect and concentrate/focus the light from its source.

The combination of **Low and Jain** discloses everything above but fails to teach wherein said analysis plate comprises silicon or is made of quartz glass.

However, **Chang** shows in Figure 2 an analysis plate (10) that can comprise silicon or can be made of quartz glass (see claim 4).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination of **Low and Jain et al.** by having a plate made of silicon or quartz glass as taught as **Chang** to dissipate heat and allow easy transmission of signals through the silicon or quartz glass.

As to claim 2, **Low** discloses in Figure 8 said analysis plate (46) is also used as a stage mounting said sample thereon (Col.7 Ins 32-34).

As to claim 9, **Low** discloses in Figure 8 a second driver (90) for moving said optical system (92,94) of said failure detector in parallel to said first main surface of said analysis plate (46), wherein said first driver (98,100,102) notifies said second driver (90) of movement information (Col. 7 Ins 46-61) of said analysis plate (46), and said second driver (90) moves said optical system (50) based on said movement information.

As to claim 10, **Low** discloses in Figure 8 a probe (20) coming into contact with said sample (64) on said analysis plate (46); and a driver (86,88) for moving said probe (20) and said sample (64) in parallel to said first main surface of said analysis plate (46) independently of said analysis plate (46) without involving change in positional relationship between said probe (20) and said sample (64).

### ***Response to Arguments***

3. Applicant's arguments filed 05/20/2008 have been fully considered but they are not persuasive.

As to applicant's argument of "None of the cited references teaches or suggests amended claim 1 "first driver for changing the position of said protrusion relative to said sample in a direction parallel to said first main surface by moving said analysis plate in parallel to said first main surface." Moreover, none of Low, Jain, and Chang produces or even suggests the aforementioned advantageous effects of the claimed structure.", the examiner respectfully disagrees.

The combination of Low, Jain, and Chang references does disclose wherein said failure analyzer as shown by Low in Figure 8 comprises a support member for

supporting said sample independently of said analysis plate and a first driver for changing the position of said recess relative to the sample in a direction parallel to said first main surface by moving said analysis plate in parallel to said first main surface. The first driver will change the position of the recess which will comprise the protrusion shown by Jain in a direction parallel, as shown by arrow Z, to said first main surface which is the surface on which the sample is mounted.

Therefor the combination of Low, Jain, and Chang references does disclose the limitations of claim 1.

#### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arleen M. Vazquez whose telephone number is 571-272-2619. The examiner can normally be reached on Monday to Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M. V./

Examiner, Art Unit 2829

08/14/2008

/Ha T. Nguyen/

Supervisory Patent Examiner, Art Unit 2829